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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,099	08/07/2003	Robert R. Gallucci	RD27416-2	3376

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EXAMINER	
TRAN, THAO T	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/638,099	GALLUCCI ET AL.	
	Examiner	Art Unit	
	Thao T. Tran	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7,8 and 10-23* is/are pending in the application.

4a) Of the above claim(s) *3,12-14,20 and 23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,7,8,10,11,15-19,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/3/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments filed on 01/20/2006. The IDS filed on 01/03/2006 is also acknowledged.

2. Claims 1, 3-5, 7-8, 10-23 are currently pending in this application. Claims 1, 19, and 21 have been amended.

3. Claims 3, 12-14, 20, and 23 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, as indicated in the Paper filed 10/22/2004.

4. Claims 1, 4-5, 7-8, 10-11, 15-19, and 21-22 are currently examined.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 4-5, 7-8, 10-11, 15-19, and 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 19, and 21 introduce the newly added limitation, "a protective layer comprising the plasma decomposition product of an oxidant and a reactant gas selected from .....

organosilicon compounds", that has no proper support in the specification as originally presented. Although the specification does disclose a protective layer as described to US Pat. 6,110,544 to Yang et al. and US Pat. 6,379,757 to Iacovangelo, it does not disclose a protective layer incorporated by reference or that the protective layer comprising the plasma decomposition product as recited in the instantly amended claims.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 4-5, 7-8, 10-11, 15-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,420,032. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the claims of the patent overlaps that of the instant claims, rendering them obvious over each other.

The claims of the patent disclose all of the limitations as recited in the instant claims. However, independent claims 1, 17, and 35 of the patent disclose the transparent metal oxide layer; whereas instant claims 1, 19, and 21 disclose a haze-prevention layer. Thus, the scope of the claims of the patent overlaps that of the instant claims, rendering them obvious over each other.

Note that the abrasion resistant layer or scratch resistant layer in claims 25-28, 36 of the patent is considered as the protective layer in the instant claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 7-8, 10-11, 16-17, 19, 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Iacovangelo (US Pat. 6,420,032).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Iacovangelo discloses a laminate, comprising a polymeric substrate 1, an interlayer 5 (haze-prevention layer), a reflective metal layer 2, a metal oxide UV absorbing layer 3, and an abrasion resistant layer 4 (protective layer) (see Fig. 3A-D; col. 6, ln. 13-44). The polymeric substrate comprises a thermoplastic resin, such as polyetherimide or polyethersulfones (see col. 2, ln. 35-37; col. 4, ln. 29-36). The interlayer and the abrasion resistant layer comprise a plasma polymerized organosilicon as recited in the instant claims (see col. 6, ln. 19-37). The reflective metal layer comprises aluminum or silver (see col. 5, ln. 36-42).

With respect to the properties, such as heat distortion, volume resistivity, and tensile modulus, since the reference teaches the same article with the same chemical components, the article of the reference would inherently have the same properties as the presently claimed invention.

11. Claims 1, 7-8, 10-11, 16-17, 19, 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Iacovangelo (US Pat. 6,261,694).

Iacovangelo discloses a laminate, comprising a polymeric substrate 1, an interlayer 6 (haze-prevention layer), a UV absorbing layer 2, an IR reflection layer 3, an interlayer 7, and an abrasion resistant layer 5 (protective layer) (see Fig. 3D-E). An adhesion promoting layer 8 is added directly below the UV absorbing layer 2 (see col. 7, ln. 50-51). Thus, the adhesion promoting layer 8 is between interlayer 6 and layer 2.

Iacovangelo further discloses the substrate comprising polycarbonate, polysulfone, or polyetherimide (see col. 5, ln. 7-13, 41-49). The adhesion promoting layer 8 and the IR reflection

layer 3 comprise silver or aluminum (see col. 6, ln. 1-8). The interlayers 6, 7, and the abrasion resistant layer comprise a plasma polymerized organosilicon as recited in the instant claims or silicon oxide (see paragraph crossing col. 6 and col. 7; col. 7, ln. 11-52). The thickness of layer 3 is about 20-25 nm (see Table 1).

With respect to the properties, such as heat distortion, volume resistivity, and tensile modulus, since the reference teaches the same article with the same chemical components, the article of the reference would inherently have the same properties as the presently claimed invention.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 4-5, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iacovangelo '694 as applied to claim 1 above.

Iacovangelo '694 is as set forth in claim 1 above and incorporated herein.

Iacovangelo does not specifically teach the substrate to be substantially free of inorganic filler, the thickness of the substrate, or the thickness of the interlayers. However, the reference further discloses the substrate to be flexible or rigid, and transparent or not transparent (see col. 5, ln. 57-58), and the thickness of each layer is not necessarily to scale (see col. 6, ln. 4-5).

Therefore, it would have been obvious to one of ordinary skill in the art, that the substrate of Iacovangelo would have been made substantially free of inorganic and the thickness of each layer would have been adjusted, in order to obtain the properties desired of the product.

Iacovangelo does not teach the use of the laminate as an automotive headlight reflector. However, the reference discloses the laminate to be employed in a range of automotive glass applications (see col. 6, ln. 26-27).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the laminate of Iacovangelo as an automotive headlight reflector as well. By teaching the laminate comprising IR reflector layers and the use of the laminate in a range of automotive glass applications, Iacovangelo's invention would also include the use of the laminate as a headlight reflector.

Response to Arguments

14. Applicant's arguments filed on 01/20/2006 have been fully considered but they are not persuasive.

With respect to Applicant's argument that no claims in the US Patent 6,420,032 to Iacovangelo disclose the protective layer, it is hereby noted that the abrasion resistant layer or scratch resistant layer in claims 25-28, 36 of the patent reads on the protective layer in the instant claims. Thus, the obviousness double patenting rejection of the claims is sustained.

Applicant further contends that neither Iacovangelo '032 nor Iacovangelo '694 teaches the protective layer in the presently claimed invention. However, as shown above and in the Office action of 11/29/2005, both references disclose an abrasion or scratch resistant layer that

would read on the presently claimed protective layer. Moreover, Iacovangelo '694 also discloses the abrasion resistant layer as incorporated by reference in its entirety to Yang '544 (see col. 12, ln. 31-40), which is the same reference cited in the present specification.

Thus, both Iacovangelo '032 and Iacovangelo '694 anticipate the presently claimed invention.

With respect to Applicant's arguments that there is no motivation to rearrange the layers in Iacovangelo '694 because the reference does not teach a protective layer as presently claimed, the same arguments are as presented above.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thao Tran

tt
March 31, 2006

THAO T. TRAN
PATENT EXAMINER